

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Berberis vulgaris*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
32	ALPHA-TOCOPHEROL	Leaf	213	213	-0.4086139984388556	Jim Duke's personal files.
5	ALUMINUM	Bark	--	489	1.2160510458026077	
5	ALUMINUM	Root	489	489	-0.050103911599143874	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
112	ASCORBIC-ACID	Leaf	--	--		Jim Duke's personal files.
112	ASCORBIC-ACID	Bark	--	--		
112	ASCORBIC-ACID	Root	--	--	-0.6459735820044326	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
112	ASCORBIC-ACID	Fruit	1560	3800	-0.048216433102063125	
38	BERBAMINE	Root Bark	--	--		Jim Duke's personal files.
38	BERBAMINE	Bark	--	--		Jim Duke's personal files.
38	BERBAMINE	Root	--	--		Jim Duke's personal files.
38	BERBAMINE	Plant	--	--		
38	BERBAMINE	Stem Bark	5900	5900		Jim Duke's personal files.
130	BERBERINE	Stem	1600	28900		Jim Duke's personal files.
130	BERBERINE	Leaf	3000	3000	1	Jim Duke's personal files.
130	BERBERINE	Bark	45000	45000	1	Jim Duke's personal files.
130	BERBERINE	Root	4000	64800	1.0732112991587024	
130	BERBERINE	Root Bark	25000	80000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
130	BERBERINE	Stem Bark	20000	25000	1	Jim Duke's personal files.
130	BERBERINE	Plant	--	--		Jim Duke's personal files.
130	BERBERINE	Flower	6600	6600		Jim Duke's personal files.
1	BERBERRUBINE	Plant	--	--		Jim Duke's personal files.
1	BERBERRUBINE	Bark	--	--		Jim Duke's personal files.
1	BERBERRUBINE	Root	--	--		Jim Duke's personal files.
53	BETA-CAROTENE	Fruit	--	--		Jim Duke's personal files.
53	BETA-CAROTENE	Root	--	--	-0.4364222203358877	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	BETA-CAROTENE	Bark	--	--		
102	CAFFEIC-ACID	Fruit	--	--		Jim Duke's personal files.
102	CAFFEIC-ACID	Plant	--	--		
28	CALCIUM	Bark	--	19100	0.04088065432927098	
28	CALCIUM	Root	19100	19100	1.281053988711049	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	CAPSANTHIN	Fruit	--	--		
2	CHELIDONIC-ACID	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
77	CHLOROGENIC-ACID	Fruit	--	--		Jim Duke's personal files.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	CHROMIUM	Bark	--	1.2	-0.46695777588719756	
24	CHROMIUM	Root	12	1.2	-0.32076409255495114	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
23	CITRIC-ACID	Plant	--	--		
2	COBALT	Root	42	4.2	-0.454047411785451	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	COBALT	Bark	--	4.2	-0.42125785418549894	
7	COLUMBAMINE	Plant	--	--		
7	COLUMBAMINE	Root	--	--		Jim Duke's personal files.
7	COLUMBAMINE	Bark	--	--		Jim Duke's personal files.
7	COLUMBAMINE	Stem Bark	2900	2900		Jim Duke's personal files.
7	COLUMBAMINE	Stem	--	--		Jim Duke's personal files.
5	CYANIN	Fruit	--	--		Jim Duke's personal files.
5	CYANIN	Leaf	--	--		Jim Duke's personal files.
1	DELPHINIDIN-3-O-BETA-D-GLUCOSIDE	Leaf	--	--		Jim Duke's personal files.
30	ESCULETIN	Fruit	--	--		Jim Duke's personal files.
15	FIBER	Root	134000	134000	1.0190982480192092	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
8	FRUCTOSE	Plant	--	--		
7	GLUCOSE	Plant	--	--		
16	HYDRASTINE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
30	HYPEROSIDE	Fruit	--	--		Jim Duke's personal files.
6	IRON	Bark	--	141	-0.2726653452388328	
6	IRON	Root	1410	141	-0.23680974639816418	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
22	ISOQUERCITRIN	Fruit	--	--		Jim Duke's personal files.
11	ISOTETRANDRINE	Plant	--	--		
13	JATRORRHIZINE	Root	--	--		Jim Duke's personal files.
13	JATRORRHIZINE	Bark	--	--		Jim Duke's personal files.
13	JATRORRHIZINE	Plant	--	--		
13	JATRORRHIZINE	Stem Bark	3600	3600		Jim Duke's personal files.
13	JATRORRHIZINE	Stem	--	--		Jim Duke's personal files.
75	KAEMPFEROL	Plant	--	--		
15	LUTEIN	Plant	--	--		
65	MAGNESIUM	Bark	--	1430	-0.21822262602145115	
65	MAGNESIUM	Root	1430	1430	-0.6021008569187567	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
11	MAGNOFLORINE	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
11	MAGNOFLORINE	Root	--	--		Jim Duke's personal files.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	MALIC-ACID	Plant	--	--		
15	MALIC-ACID	Fruit	--	--		Jim Duke's personal files.
14	MANGANESE	Fruit	72	72	0.07122111766474458	Jim Duke's personal files.
14	MANGANESE	Bark	--	6	-0.6364342982594638	
14	MANGANESE	Root	60	6	-0.47422778363505214	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
39	NIACIN	Root	--	81	0.8915275962998075	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
39	NIACIN	Bark	--	81	0.2578378448300648	
10	OXYACANTHINE	Stem Bark	10000	10000		Jim Duke's personal files.
10	OXYACANTHINE	Plant	--	--		
10	OXYACANTHINE	Root	--	--		Jim Duke's personal files.
10	OXYACANTHINE	Bark	--	--		Jim Duke's personal files.
10	OXYACANTHINE	Root Bark	--	--		Jim Duke's personal files.
17	PALMATINE	Root	--	--		Jim Duke's personal files.
17	PALMATINE	Plant	--	--		
17	PALMATINE	Stem	--	--		Jim Duke's personal files.
17	PALMATINE	Bark	--	--		Jim Duke's personal files.
24	PECTIN	Fruit	--	--		
1	PELARGONIN	Fruit	--	--		Jim Duke's personal files.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	PEONIDIN-3-O-BETA-D-GLUCOSIDE	Leaf	--	--		Jim Duke's personal files.
1	PETUNIDIN-3-O-BETA-D-GLUCOSIDE	Fruit	--	--		Jim Duke's personal files.
4	PHOSPHORUS	Bark	--	450	-0.6352599515754915	
4	PHOSPHORUS	Root	450	450	-0.5390309919095246	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	POTASSIUM	Root	4370	4370	-0.8353902413704184	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	POTASSIUM	Bark	--	4370	-0.3528759279078849	
176	QUERCETIN	Plant	--	--		
15	RIBOFLAVIN	Bark	--	9.4	2.0673075679276955	
15	RIBOFLAVIN	Root	9.4	9.4	1.1654342408130138	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
87	RUTIN	Fruit	--	--		Jim Duke's personal files.
60	SELENIUM	Root	--	3.4	-0.12058843939849437	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
60	SELENIUM	Bark	--	3.4	-0.14068469031161568	
4	SILICON	Root	23	2.3	-0.33233926906342903	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Bark	--	2.3	-0.5383130457856886	
9	SINAPIC-ACID	Plant	--	--		
1	SODIUM	Root	350	350	-0.34980723700266797	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Bark	--	350	-0.04229439782411715	
5	STARCH	Bark	--	90000	0.06580046651608526	
14	SUCROSE	Fruit	--	--		Jim Duke's personal files.
35	TANNIN	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
35	TANNIN	Fruit	55600	55600	-0.37527226866356317	Jim Duke's personal files.
6	TARTARIC-ACID	Plant	--	--		
31	THIAMIN	Root	10	10	0.29583140028457455	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	TIN	Root	26	26	0.9670741465839783	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	TIN	Bark	--	26	1.6805545028405047	
89	URSOLIC-ACID	Fruit	--	--		Jim Duke's personal files.
1	VITAMIN-K	Leaf	--	--		Jim Duke's personal files.
1	YATRORICINE	Plant	--	--		
5	ZEAXANTHIN	Plant	--	--		
77	ZINC	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	ZINC	Bark	--	--		